

Florida E-Waste Removal

Public site and operations platform for commercial IT asset disposal: lead capture, serial-level chain of custody, and generated certificates of destruction.

Industry: Environmental Services

Client: Deselt, Inc.

Service: Software

One table serves custody, certificates, inventory and P&L

Destruction rules enforced by database constraint, not policy

Serial-level Certificate of Destruction, PDF, token-delivered

Pricing has a single source of truth across site and quoting

The Challenge

Commercial e-waste removal looks like a hauling business and is really a documentation business. The buyer is an office manager with a storage room of retired computers, and what they are actually paying for is proof that the drives were destroyed. Off-the-shelf tools handle either the marketing site or the job tracking, never the link between them, so the serial numbers that matter live on a clipboard and the certificate is a Word template someone retypes. The venture also had no way to filter enquiries: a household with one old tower costs money to serve, and every quote request looked identical.

Our Solution

One ASP.NET Core application covering both halves. The public site is Razor Pages with static server rendering, chosen over Blazor Server so there is no SignalR circuit per anonymous visitor and nothing between a crawler and the content. The authenticated operations module is Blazor Server, where interactivity earns its keep. A single table, JobAsset, is the spine: one row per physical device, carrying serial, destruction method, verification timestamp and disposition. The same rows prove chain of custody, source the certificate, act as resale inventory and close per-job profit and loss. Business rules are enforced in the database rather than documented: a data-bearing asset cannot be dispositioned until its destruction method is verified, and a certificate will not render while any serial is unaccounted for. Pricing lives in one table that both the public page and the quote calculator read, so what the site advertises and what a quote charges cannot drift apart.

The Results

Delivered and live. Ten guarded SQL migrations, sixteen public pages, and an operations module covering

leads, enquiries, jobs, serial capture, certificates, pricing and content. Certificates render to PDF with every serial listed and are delivered by single-use token from storage outside the web root. An AI content pipeline drafts posts against a queue of commercial search topics, capped at three per week and gated so nothing publishes with unresolved placeholders. Deployed behind a reverse proxy with encrypted credentials at rest. Commercial results are not yet measurable - the site launched this month.

Tech Stack

ASP.NET Core 8 · Razor Pages · Blazor Server · SQL Server · Entity Framework Core · Hangfire · QuestPDF · Markdig

Ready to start a similar project?

info@deselt.com · deselt.com · St. Lucie County, FL